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QUALITY EVALUATION OF DATA DERIVED FROM ADMINISTRATIVE RECORDS: THE PERSONAL INCOME TAX RECORDS

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I. INTRODUCTION

The quality of data products is a fundamental, pervasive and central concern in Statistics Canada. The data are used in many programs, and often are specified as the data source.

With regard to administrative records, several distinctions must be made. First, the conventional surveys and censuses are used to collect data to address specific issues, questions and topics. The statistical officials prepare the questions, undertake the field work, capture the raw data, process the data along with edits and imputations, and, eventually, disseminate the data.

With administrative records, the scenario is notably different. In this model, program administrators, who often do not possess statistical training, develop instruments to collect data for program administration. These instruments are completed according to administrative instructions, are processed by clerical staffs, and the data are frequently machine-captured. By the time these data become available to statisticians, few if any statistical considerations have been incorporated into the data sets.

Furthermore, the instructions provided for the completion of the instruments change over time; the processing instructions (both clerical and machine) change over time; data can be missing; the statutes and regulations governing the administrative programs also change over time. If this is not enough, there are the additional possibilities that the data were reported in error, and the recognition that the data obtained from administrative records are based on concepts and definitions pertaining to programs and program administration, concepts and definitions that may not fit very well with the established statistical ones.

In spite of their many shortcomings, administrative records have been used for statistical purposes for a long time, primarily for data on economic and institutional matters (e.g., education). In recent years, Statistics Canada has initiated a project to derive statistical information from administrative records held on individual persons for deriving social data between censuses of population. In this paper, some consideration will be given to questions

about the the quality of data derived from one administrative record set, the personal income tax file.

II. GENERAL METHODOLOGY AND DATA SOURCES FOR COMPARISONS

It is clear that administrative records contain bias. Data are only available for those who participate, qualify, or whatever. In this sense, administrative records tend to cover sub-populations. In this paper, the general methodology will involve the selection of data from alternative sources for the purpose of making comparisons and drawing inferences about the quality of administrative data derived from the personal income tax records.

With regard to the specific data series that can be used for comparisons, the possibilities are quite large. In this paper, the emphasis will be placed on data from the following sources: the Census of Population, the monthly Labour Force Survey (LFS), the annual Survey of Consumer Finances, selected data from the annual national accounts, and data on monies paid out in administering selected government transfer payments programs.

Although a variety of possibilities exist for the direct comparison of data, a generic formulation of coverage rates is defined as the basic model. It can be stated as follows:

$$\frac{\text{Measurement for Tax-Data Variable Y}}{\text{Measurement for Similar Variable, but from an Alternative Data Source}} \times 100$$

Variable Y could include many different demographic counts and dollar amounts, the two principal kinds of data comparisons that are included in the next two sections.

III. DEMOGRAPHIC COVERAGE RATES

The coverage rates for demographic variables can be derived for variables such as (a) basic population, (b) by selected attributes such as age and sex.

A. Population Comparison, 1981

The 1980 personal income tax file (T1) is for the period of about March/April 1981, and it can be compared to the data collected in June, 1981 for the census program. Initially, it is possible to compare the count of taxfilers to the count of population from the Census. The result is as follows:*

No. of Taxfilers, Spring 1981	*14,525,984*
Census Population, June 1981	*24,343,175*
Percent Coverage	*59.7%*

This direct comparison can also be made for sub-national data such as provinces, cities and so forth. Table 1 is appended with similar coverage ratios for the provinces and territories.

While each tax filer can be considered independently, many taxfilers have dependents that can be imputed by using the dollar value of the personal exemptions. This imputation was undertaken for 1981 with the following result for Canada:

Imputed Taxfiler Population, Spring 1981	*23,957,268*
Census Population, June 1981	*24,343,175*
Percent Coverage	*98.4%*

Once the taxfiler population is adjusted for the population of reported dependents, the coverage changes consid-

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** The taxfiler counts for sub-sections A-C are after edit and imputation (ie. records with missing values, illegitimate values may have values imputed; other records with certain codes such as bankruptcy, deceased, or immigrant/emigrant in same year are removed from the file).*

erably. There is, nevertheless, some double-counting and over-counting in the imputations. Some taxfilers are both taxfilers and dependents while others are non-resident dependents. While efforts are made to eliminate double-counting, it is not possible to eliminate it entirely. As for over-counting, there is no known method of eliminating the count of individuals who are legally claimed as dependents, but who are not residents of Canada. (Table 2 is appended with additional information on the coverage of the imputed population by provinces and territories.)

B. Population Comparison by Sex, 1981

Data from the 1980 T1 can also be compared to the 1981 Census for males and females.

No. of Male Taxfilers, Spring 1981	7,702,968
Census Male Population, June 1981	12,068,285
Percent Coverage	63.8%
No. of Female Taxfilers, Spring 1981	6,823,016
Census Female Population, June 1981	12,274,890
Percent Coverage	55.6%

As was the case in (A) above, it is also possible to make a comparison of the imputed male and female populations through the use of the reported exemptions by taxfilers. These results can be summarized as follows:

No. of Imputed Male Taxfilers, Spring 1981	11,326,750
Census Male Population, June 1981	12,068,285
Percent Coverage	93.8%
No. of Imputed Female Taxfilers, Spring 1981	12,630,518
Census Female Population, June 1981	12,274,890
Percent Coverage	102.9%

The percent coverage for females illustrates the double-counting phenomenon. A major source of overcoverage for females is the Child Tax Credit. When the CTC was introduced for the 1978 tax year, the coverage of imputed female taxfilers increased by more than 10%. Women who had previously appeared on the tax file only as dependents on their husbands' tax returns began filing their own tax returns as well as being claimed as dependents. These women are therefore being counted twice: as taxfilers and as imputed dependents.

C. Population Comparison by Age, 1981

Comparisons of the coverage ratios by age reflect the lower rates of taxfiling in both the higher and lower age groups, those less likely to be receiving income for which they have a tax liability.

(1) AGE GROUPS	(2) CENSUS POPULATION	(3) NUMBER OF TAXFILERS	(4) TAXFILERS+ DEPENDENTS	COVERAGE RATES (3)/(2)	(4)/(2)
<18	6,845,150	291,272	6,636,631	4.2	96.9
18-24	3,294,655	2,823,707	3,622,795	85.7	110.0
25-44	7,184,345	6,511,222	7,748,510	90.6	107.8
45-64	4,658,070	3,640,849	4,488,168	78.2	96.4
65+	2,360,970	1,258,934	1,461,164	53.3	61.9

Again, most of the women who file for the CTC fall into either the 18-24 or 25-44 age group, leading to double-counting in these groups. Another source of double-counting in the 18-24 age group for both males and females is children who earn some money and file their own tax return (usually to obtain a tax refund for taxes withheld by their respective employers), but are still claimed as dependents by their parents.

D. Missing Data on Sex, Age and Marital Status

A final demographic consideration pertains to the extent to which the basic demographic attributes are present

(absent) from the tax returns. Thus, looking solely at the population of taxfilers for a few recent years, it is possible to note the frequency (and percentage) with which these data items are not reported by taxfilers.

	FREQUENCY OF MISSING DATA FOR			NUMBER OF TAXFILERS BEFORE E&I
	SEX	AGE	MARITAL STATUS	
1981	40,678	2,854	35,629	15,231,185
1982	42,043	13,477	122,029	15,238,257
1983	38,090	20,305	115,379	15,336,355

	PERCENTAGE OF TAXFILER RECORDS WITH MISSING VALUES FOR		
	AGE	SEX	MARITAL STATUS
1981	0.27%	0.02%	0.23%
1982	0.28%	0.09%	0.80%
1983	0.25%	0.13%	0.75%

From the above table, it can be observed that the frequency of missing data is, on average, fairly low. The above table does not indicate, however, to what extent the data are accurate (i.e., respondent reporting errors). While the latter may be a problem, it is important to note that individual taxfilers are asked to sign their tax return in conjunction with the following sentence:

> *"I hereby certify that the information given in this return and in any documents attached is true, correct and complete in every respect and fully discloses my income from all sources."*

Just below the box with the above sentence and the space for the taxfiler to sign his/her name along with the date, there is another brief sentence that reads as follows:

"It is a serious offence to make a false return."

While this statement may be interpreted differently by individual taxfilers and while the tax authorities probably do not regard all missing information the same (age, sex and marital status being relatively less important than missing income information), taxfilers have an incentive, albeit negative, both to report these data items and to report them correctly. Although the potential of obtaining incorrect information for these data items does exist, this problem is not, however, unique to administrative records. Respondents to questions on both household survey and census of population instruments may also report in error.

E. Summary, Demographic Comparisons

In reviewing the coverage of the population in this section, it appears that the taxfiler counts plus dependents provide a reasonably high coverage of the population compared to the 1981 Census. When these comparisons are made for smaller subsets of the population by age and sex, it becomes quite apparent that the coverage rates depart from the broad population coverage. In particular, it is apparent that overcoverage of females occurs (primarily in the 18-24 and the 25-44 age ranges), and that undercoverage occurs for the 65+ population.

From a general quality perspective, the estimated population of taxfilers plus dependents (i.e., 98.4 percent) does not appear nearly as encouraging. Nevertheless, two separate R&D activities are underway at this time to address the coverage problems. One project is directed at the linkage of spouses as a means of reducing the over-counting of the female population. Additionally, one part of this project is directed at the linkage of siblings to their respective parents through address linkages as a means of reducing the over-counting of dependent children who file tax returns.

Secondly, while at least one third of the 65+ population does not file a tax return, virtually 100 percent of the population aged 65+ is eligible for and receives a monthly OAS benefit. It is probable that the tax file and OAS files can be merged on a geographical building block basis to create a geographically-linked data set that will ensure that the enhanced file will have a much improved coverage of the 65+ population.

Thus, while the overall coverage of the population is encouraging at 98.4 percent, the over- and under-counting dimensions are uneven. With the enhancements that are currently being investigated, it is anticipated that these sub-population coverage problems will be reduced over the next one to two years.

IV. INCOME COMPARISON FOR INDIVIDUALS, SURVEY DATA VERSUS ADMINISTRATIVE DATA

Statistics Canada has an annual survey to obtain income data for individual Canadians, the Survey of Consumer Finances. A number of statistical series are derived from this survey for reporting incomes for families, families by size groups, and so on. In addition, data are tabulated on average and median incomes for all individuals (both males and females) reporting income.

Since the personal tax data are currently available for individual taxfilers alone, some insights can be obtained from a direct comparison of median and average income values for taxfilers (including both males and females) between the T1 and the SCF. In this section of the paper, the reader's attention is drawn to this comparison.

The following table includes median income data for males, females and totals. In addition, some ratios have been calculated for these income variables as a means of providing some notion of the relationship of these income values over time.

MEDIAN INCOME COMPARISON OF THE SCF VERSUS THE T1, 1976-1983 (CURRENT DOLLARS)

MEDIAN INCOME

YEAR	MALES SCF	MALES T1	FEMALES SCF	FEMALES T1	TOTAL SCF	TOTAL T1
1976	11034	11247	3929	5784	7151	8373
1977	11830	12097	4640	6295	7804	8985
1978	12603	13035	5091	6361	8413	9442
1979	13806	14113	5535	6823	9277	10186
1980	15231	15667	6159	7819	10099	11469
1981	16770	17412	7281	8815	11412	12766
1982	17594	18540	7984	9684	12145	13776
1983	17613*	18924*	8071*	9719*	12142*	13930*

* Preliminary data.

MEDIAN INCOME COVERAGE

	T1/SCF MALES	T1/SCF FEMALES	T1/SCF TOTAL
1976	101.9	147.2	117.1
1977	102.3	135.7	115.1
1978	103.4	124.9	112.2
1979	102.2	123.3	109.8
1980	102.9	127.0	114.4
1981	103.8	121.0	111.9
1982	105.4	121.3	113.4
1983	107.4*	120.4*	114.7*

* Preliminary data.

In reviewing the ratio data in the above table, it is apparent that the median tax data are always higher than the SCF medians. This is not surprising in that those individuals with very low incomes who do not earn income subject to tax withholding have no incentive to file tax returns, with the exception of those taxfilers eligible to obtain Child Tax Credits.

One particular noteworthy point occurs in the ratio for females between 1977 and 1978. In 1978, the median for females increased very little. This was a direct result of the Child Tax Credit program, a program that led to about a 10 percent increase in the number of female taxfilers, many of whom had low incomes. The much smaller increase in the median for female taxfilers in 1978 compared to the SCF resulted in a narrowing of the coverage ratio from 135.7 in 1977 to 124.9 in 1978.

It is not immediately apparent whether future enhancements to the tax file will enable a further closing of the gap in medians between the SCF and the tax data.

V. DOLLAR AMOUNT COVERAGE RATES

In addition to questions about the coverage of demographic attributes, coverage questions arise with regard to the accuracy of the reporting of individual income components. For example, one might ask questions about the accuracy with which taxfilers report their income from sources such as wages and salaries, Unemployment Insurance, Family Allowances, and Old Age Security. In this section, a brief review is made of the general reporting trends for these income sources.

A. Wages and Salaries

The T1 file is not the only source of data on wages and salaries. Other sources include the Census of Population, and the Survey of Consumer Finances. Some comparisons are provided below to illustrate the degree to which the T1 compares to these statistical sources of wages and salaries data.

Dollar Income Comparisons for Wage & Salary Income:

(1) Wages & Salaries reported by taxfilers (1980) versus Wages & Salaries for 1980 as reported on 1981 Census of population.*

Coverage of dollar amounts reported, by sex (millions of dollars):

	Dollars reported by males	Dollars reported by females	Total dollars reported
TAX	107,693	42,177	149,870
CENSUS	110,983	44,101	155,084
COVERAGE	97.0%	95.6%	96.6%

Coverage of dollars amounts reported and counts of individuals, by range of wage & salary income reported (dollar amounts in millions; counts in thousands):

WAGE & SALARY INCOME RANGE	TAX		CENSUS		COVERAGE RATIOS	
	$	count	$	count	$	count
$1-2999	2,490	1,637	2,794	2,085	89.1%	78.5%
$3000-9999	19,644	3,103	18,641	3,006	105.4%	103.2%
$10000-19999	55,108	3,440	56,440	3,930	97.6%	95.9%
$20000 &over	72,627	2,544	77,210	2,749	94.1%	92.5%

* NOTE: The data for these comparisons were obtained from 2% samples of the 1980 tax file and the 1981 Census file.

(2) Wages & Salaries reported by taxfilers (1981) versus Wages & Salaries for 1981 reported on 1982 Survey of Consumer Finances.

Coverage of dollar amounts reported, by sex (millions of dollars):

	Dollars reported by males	Dollars reported by females	Total dollars reported
TAX	123,211	49,830	173,041
CENSUS	123,998	51,371	175,369
COVERAGE	99.4%	97.0%	98.7%

B. Unemployment Insurance Income

Taxfilers receiving UI income are required to report this income on their respective T1 returns. Since it is relatively easy to obtain data on the annual UI benefit payouts, a direct comparison of the dollars paid out and the dollars reported by taxfilers represents one means of assessing the quality of the income tax data.

DOLLAR INCOME COMPARISON FOR UNEMPLOYMENT INSURANCE: DOLLARS PAID OUT COMPARED TO DOLLARS REPORTED BY TAXFILERS (in millions), 1976-1983

YEAR	DOLLAR EXPENDITURES	DOLLARS REPORTED BY TAXFILERS	COVERAGE RATIO
1976	3361.6	3061.7	91.1
1977	3909.0	3569.9	91.3
1978	4536.9	4183.6	92.2
1979	4008.0	3701.1	92.3
1980	4393.3	4085.4	93.0
1981	4828.3	4458.9	92.3
1982	8575.4	7999.8	93.3
1983	10169.1	9352.6	92.0

C. Family Allowance Income

Comparisons for the FA dollar payouts to the reported FA income through the tax system are directly comparable to the procedure for the UI program noted above.

DOLLAR INCOME COMPARISON FOR FAMILY ALLOWANCE INCOME: DOLLARS PAID OUT COMPARED TO DOLLARS REPORTED BY TAXFILERS (in millions), 1976-1983

YEAR	DOLLAR EXPENDITURES	DOLLARS REPORTED BY TAXFILERS	COVERAGE RATIO
1976	1942	1762	90.7
1977	2084	1889	90.6
1978	2224	2152	96.8
1979	1696	1658	97.8
1980	1812	1772	97.8
1981	1958	1933	98.7
1982	2204	2165	98.2
1983	2303	2230	96.8

D. Old Age Security Income

Also, the dollar payouts for the OAS/GIS program can be compared to the OAS benefits reported by taxfilers. Of course, these are not directly comparable numbers. Low income elderly persons can often qualify for a supplementary benefit program, Guaranteed Income Supplement, which is non-taxable. Hence, the very poorest of the 65+ population would not be expected to file tax returns, and for those who did file a return, only the OAS portion of their income would appear on the tax file.

DOLLAR INCOME COMPARISON FOR OLD AGE SECURITY INCOME: DOLLARS PAID OUT COMPARED TO DOLLARS REPORTED BY TAXFILERS (in millions), 1976-1983

YEAR	OAS + GIS DOLLAR EXPENDITURES	OAS DOLLARS REPORTED BY TAXFILERS	COVERAGE RATIO
1976	4305	2192	50.9
1977	4692	2522	53.8
1978	5238	2901	55.4
1979	6085	2803	46.1
1980	7020	3323	47.3
1981	8213	3323	40.5
1982	9304	3826	41.1
1983	10137	4267	42.1

E. To Summarize

In reviewing the data in this section, it is apparent that the dollar coverage of the tax data is always lower. For wages and salaries, the coverage seems to be in the 95+ percent range relative to both Census and SCF data.

Compared to expenditures under the three social programs noted in this section, the best coverage has been for the FA program (especially since the introduction of the Child Tax Credit program in 1978). The coverage for the UI program has been consistently in the 90-93 percent range, while the coverage of the OAS program has been much lower, overall.

It is anticipated that the forthcoming work with the OAS file will lead to substantial improvements in the coverage of this population sub-group, including much improved coverage of the income component since the GIS (Guaranteed Income Supplement) program is a program for which elderly recipients must supply income information and demonstrate financial need.

VI. LABOUR FORCE COMPARISON

The monthly survey of the labour force (LFS) is a source of considerable detail. These data are not, however, available on an annual basis directly from the survey, although a LFS supplement has been conducted in recent years from which annual data are obtained.

The personal income tax data can also be used to derive a "gross" measure of the labour force by assuming that an individual who earned income from a source associated with employment (e.g., wages and salaries, net professional income, etc.) was in the labour force.

Although the data from these two sources should be generally similar, there is no reason to expect that they would be the same. For example, one obvious difference between these data sources is that the LFS is subject to seasonal variation while the T1 is not.

The following table includes a data series comparison of the monthly LFS data to the annual tax data. The LFS data are presented as an average of the monthly data for each of the calendar years noted in this table.

LABOUR FORCE COMPARISON OF THE LFS VERSUS THE T1, 1976-1983 (000s)

	INDIVIDUALS IN THE LABOUR FORCE					
	MALES		FEMALES		TOTAL	
YEAR	LFS	T1	LFS	T1	LFS	T1
1976	6368	6647	3836	4004	10203	10651
1977	6505	6715	3996	4124	10500	10839
1978	6657	6829	4239	4412	10895	11241
1979	6811	6949	4420	4601	11231	11550
1980	6935	7021	4638	4811	11573	11832
1981	7053	7167	4851	5068	11904	12235
1982	7031	7006*	4926	5033*	11958	12039*
1983	7098	6868	5084	5016	12183	11885

* Preliminary data.

	COVERAGE OF INDIVIDUALS IN THE LABOUR FORCE		
	T1/LFS MALES	T1/LFS FEMALES	T1/LFS TOTAL
1976	104.4	104.4	104.4
1977	103.2	103.2	103.2
1978	102.6	104.1	103.2
1979	102.0	104.1	102.8
1980	101.2	103.7	102.2
1981	101.6	104.5	102.8
1982	99.6	102.2	100.7
1983	96.8	98.7	97.6

* Preliminary data.

Perhaps one of the most interesting comparisons arises with the Gross Labour Force (GLF), and with particular reference to the section with the ratio comparisons. For both males and females, the tax file coverage has been generally declining since 1976, the first year for which these kinds of data have been tabulated.

The source of this general decline in the GLF coverage cannot readily be explained. Although some broad conjectures have been made by the authors, no evidence has yet been found to support these ideas.

VII. CONCLUDING OBSERVATIONS

The principal objective in writing this paper was to make a series of comparisons between data derived from the personal income tax file and data derived from household surveys and the 1981 Census of Population.

In concluding this paper, some generalizations appear noteworthy about the demographic data:

- The imputed taxfiler population for 1981 (i.e.,

the sum of actual taxfilers plus imputed dependents) closely approaches the 1981 Census count (i.e., 24.0 million imputed taxfiler population versus 24.3 million counted in the census).

- *The analysis of the 1981 imputed taxfiler population indicates that the coverage of the female portion of the population is higher than the male portion (102.9% versus 93.8%, respectively). The apparent overcoverage of the female population is largely a result of double-counting, a problem that is being addressed independently at this time.*

- *The imputed taxfiler population comparison also indicates that over-counting occurs in the 18-24 and 15-44 age groups.*

- *Overall, data for the variables sex, age and marital status are rarely missing.*

With regard to the coverage of the personal income tax file for income and sources of income data, some additional generalizations seem appropriate:

- *The median income coverage of the tax file over the period 1976-1983 has been consistently higher (in the 10 to 15 percent range) than for the annual Survey of Consumer Finances. In all probability this reflects the tendency for many low income earners to be outside of the tax filing system.*

- *The gross dollar coverage of wages and salaries was in the 95+ percent range, for both males and females, compared to the 1981 Census data and the SCF.*

- *The comparisons for dollar amounts expended for three administrative programs indicated a general consistency of coverage -- UI about 92 percent, Family Allowance about 98 percent since the Child Tax Credit was introduced, and OAS about 41 percent in the last three tax years (1981-1983). (It should be noted that the recent acquisition of the OAS/GIS data enable Statistics Canada to undertake new work to improve the low coverage of the 65+*

population.)

Finally, the Gross Labour Force comparisons with the LFS indicated a general decline in the coverage of the tax file in comparison to the LFS over the period 1976-1983.

The comparisons noted in this paper generally indicate high coverages at the Canada level. The subsequent comparisons at more disaggregated levels indicate a number of difficulties, especially for female taxfilers, low income taxfilers and the 65+ population. It should be recognized, however, that the tax data are generally consistent over time.

The work with administrative records was initiated in the late 1970's with the explicit objective of developing inter-censal small area data. From the perspective of general modelling and statistical analysis, the administrative data derived from the personal income tax file offer opportunities for small area analysis that heretofore were only possible for national, provincial and large CMA regions of Canada.

In the final analysis, the tax data cannot be considered an alternative to traditional data derived from direct household collection. They do, nevertheless, have a sufficiently large coverage of the population that research analysts and program administrators have an opportunity to obtain current annual small area data for a limited array of variables that track the household data reasonably well. In this respect, the administrative tax data offer data opportunities that are proving useful at the small area level for inter-censal periods.

APPENDIX

A. Population Comparison, by Province, 1981

(1) PROV	(2) CENSUS POPULATION	(3) NUMBER OF TAXFILERS	(4) TAXFILERS+ DEPENDENTS	COVERAGE RATES (3)/(2)	(4)/(2)
NFLD	567,680	294,145	562,752	51.8%	99.1%
PEI	122,505	65,874	114,896	53.8%	93.8%
NS	847,445	478,039	829,739	56.4%	97.9%
NB	696,405	387,951	678,017	55.7%	97.4%
QUE	6,438,405	3,669,789	6,128,488	57.0%	95.2%
ONT	8,625,110	5,370,843	8,761,173	62.3%	101.6%
MAN	1,026,240	661,312	1,071,698	64.4%	104.4%
SASK	968,315	543,259	925,356	56.1%	95.6%
ALTA	2,237,725	1,326,725	2,141,267	59.3%	95.7%
BC	2,744,465	1,690,495	2,677,875	61.6%	97.6%
YUKON	23,150	14,169	22,278	61.2%	96.2%
NWT	45,745	23.280	43,729	50.9%	95.6%
CANADA	24,323,175	14,525,984	23,957,268	57.9%	98.4%

B. Population Comparison, By Sex and Province, 1981

MALES

(1) PROV	(2) CENSUS POPULATION	(3) NUMBER OF TAXFILERS	(4) TAXFILERS+ DEPENDENTS	COVERAGE RATES (3)/(2)	(4)/(2)
NFLD	285,690	158,476	263,713	55.5%	92.3%
PEI	60,940	34,690	54,403	56.9%	89.3%
NS	419,575	256,023	388,812	61.0%	92.7%
NB	346,005	205,514	317,151	59.4%	91.7%
QUE	3,172,200	1,945,320	2,860,212	61.3%	90.2%
ONT	4,246,790	2,816,990	4,139,461	66.3%	97.5%
MAN	506,510	341,816	502,569	67.5%	99.2%
SASK	486,075	297,457	442,055	61.2%	90.9%
ALTA	1,143,220	725,338	1,044,845	63.4%	91.4%
BC	1,365,155	900,999	1,280,808	66.0%	93.8%
YUKON	12,175	7,741	11,163	63.6%	91.7%
NWT	23,965	12,604	21,558	52.6%	89.9%
CANADA	12,068,285	7,702,968	11,326,750	63.8%	93.8%

FEMALES

(1) PROV	(2) CENSUS POPULATION	(3) NUMBER OF TAXFILERS	(4) TAXFILERS+ DEPENDENTS	COVERAGE RATES (3)/(2)	(4)/(2)
NFLD	281,990	135,669	299,039	48.1%	106.0%
PEI	61,565	31,184	60,493	50.6%	98.2%
NS	427,870	222,016	440,927	51.9%	103.0%
NB	350,400	182,437	360,866	52.1%	103.0%
QUE	3,266,205	1,724,469	3,268,276	52.8%	100.1%
ONT	4,378,320	2,553,853	4,621,712	58.3%	105.6%
MAN	519,730	319,496	569,129	61.5%	109.5%
SASK	482,240	245,802	483,301	51.0%	100.2%
ALTA	1,094,505	601,490	1,096,422	54.9%	100.2%
BC	1,379,310	789,496	1,397,067	57.2%	101.3%
YUKON	10,975	6,428	11,115	58.6%	101.3%
NWT	21,780	10,676	22,171	49.0%	101.8%
CANADA	12,274,890	6,823,016	12,630,518	55.6%	102.9%

REFERENCES

Data used in the tables were obtained from the following Statistics Canada publications:

Catalogue 13-207 (1983) - median income from the Survey of Consumer Finances

Catalogue 13-213 - money paid out for UI benefits
- money paid out for Family Allowances
- money paid out for OAS benefits

Catalogue 71-201 (1983) - LFS count of individuals in the labour force